



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,075	03/26/2001	Yasuyuki Mitsuoka	S004-4200PCT)	7841

7590

08/24/2005

Adams & Wilks  
31st Floor  
50 Broadway  
New York, NY 10004

EXAMINER

TRAN, THANG V

ART UNIT	PAPER NUMBER
----------	--------------

2653

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/762,075

Applicant(s)

MITSUOKA ET AL.

Examiner

Thang V. Tran

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 7-10, 12 and 18-20 is/are allowed.
- 6) ☒ Claim(s) 5, 6 and 13-17 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Objections - 37 CFR 1.75(a)***

1. Claim 11 is objected to under 37 CFR 1.75(a) for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms “the servo pit” and the servo region” in claim 11, lines 12-13, lack structural antecedent basic.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 5 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogawa (US 5,724,339).

Regarding claim 5, see Figs. 10A-13C of Ogawa which show an information recording medium comprising: a readout track inherently having a center axis and containing an information unit (pits 2Ca, 2Cb) which comprises a groove (see Figs. 10B or 11B) having a depth which increases constantly or gradually in a direction perpendicular to both a length of the track and a depth of the recording medium (see Fig. 10B or 11B). Note: limitations related to a probe and a deviation detection during reproduction of the unit of information by the probe are

Art Unit: 2653

not structures of the recording medium, but are directed to limitations intended to be used or operated with the recording medium. Therefore, these limitations are not given any patentable weight since these limitations are not the structures of the recording medium.

Regarding claim 14, see Figs. 10A-13C of Ogawa which show an information recording medium comprising: a readout track inherently having a center axis and containing an information unit (pits 2Ca, 2Cb), the unit information comprises a groove (see Figs. 10B or 11B) disposed asymmetric about the center axis of the track and each having a slant surface (see the surface of pits 2Ca and 2Cb in Fig. 10B and 11B). Note: limitations related to a probe and a deviation detection during reproduction of the unit of information by the probe are not structures of the recording medium, but are directed to limitations intended to be used or operated with the recording medium. Therefore, these limitations are not given any patentable weight since these limitations are not the structures of the recording medium.

4. Claims 6 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Okada (JP 02304737) cited by Applicant.

Regarding claim 6, see Figs. 1-3 of Okada which show an information recording medium (optical disk D) comprising: a readout track inherently having a center axis and a groove containing an information unit (recorded information) and the groove is a saw tooth shaped in a section taken in a direction perpendicular to a readout track direction and the information unit (recorded information) is formed along a slant surface of the saw tooth shaped groove 6 (see Fig. 2 and abstract for details). Note: limitations related to a probe and a deviation detection during reproduction of the unit of information by the probe are not structures of the recording medium, but are directed to limitations intended to be used or operated with the recording medium.

Art Unit: 2653

Therefore, these limitations are not given any patentable weight since these limitations are not the structures of the recording medium as claimed.

Regarding claim 15, see Figs. 1-3 which show an information recording medium (optical disk D) comprising a readout track inherently having a center axis, a slant surface (see surface of groove 6); and an information unit formed along a slant surface (information recorded on the slant surface of groove 6), and the readout track is asymmetric about an axis extending in a direction perpendicular to a scanning direction (see Figs. 2, 3 and ab abstract for details).

Note: limitations related probe and a deviation detection during reproduction of the unit of information by the probe are not structures of the recording medium, but are directed to limitations intended to be used or operated with the recording medium. Therefore, these limitations are not given any patentable weight since these limitations are not the structures of the recording medium as claimed.

5. Claims 6 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Dil (US 4,310,916).

Dil, according to Figs. 1-3 or 9-11, shows an information recording medium (see Fig. 1 or 9) comprising read-out track (2, 2') inherently having a center axis and a saw tooth-shaped groove (see Fig. 2 or 5) containing a unit of information (5) formed along a slant surface of the saw tooth-shaped groove, as recited in claims 6 and 15. Note: limitations related to reproducing probe having a microscopic aperture and detection of a deviation of the microscopic aperture ... during reproduction of the unit of information by the probe are not structures of the recording medium, but are directed to limitations intended to be used or operated with the

Art Unit: 2653

recording medium. Therefore, these limitations are not given any patentable weight since these limitations are not the structures of the recording medium as recited claims 6 and 15.

6. Claims 13, 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Ito et al (US 6,304,527)

Regarding claim 13, see Fig. 13 of Ito et al which shows an information recording medium comprising: a read-out track (65) having data region (75) forming data bits (recorded information) for reproduced data and a servo pattern region (73) forming servo bits (wobble pits) for tracking control, two of servo bits (see pair of wobble pit in track 65 as example) being asymmetric in a section about a direction of the track and symmetric in section about a center axis of the track.

Regarding claims 16 and 17, see Figs 12 and 13 of Ito et al which show an information recording/reproducing apparatus (see Fig. 12) comprising an information recording medium (see the rejection applied to claim 13 above); a probe (see probe 4 in Fig. 12) for recording/reproducing the data and servo bits on the read out track, the probe having a microscope aperture (see aperture 21, 25 or 29 in Figs. 4A-6C ) for producing near-field light and for directing the near-field light toward the read out track; and photo detecting means (62) for detecting reflection scattering light generated as a result of the scattering of the near-field light and for outputting a detection signal (see column 10, line 49 to column 11, line 17); and probe position control means (see actuator 49 in Fig. 11) for controlling a position of the probe (4) in accordance with the intensity of the detection signal or a differential signal between the detection signal (actual position detected by detector 62) ) and reference signal (designated position information). Note: see column 11, lines 18-64 for details.

Art Unit: 2653

*Allowable Subject Matter*

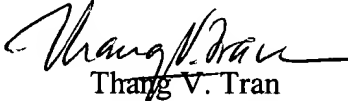
7. Claims 1-4, 7-10, 12 and 18-20 allowed.
8. Claims 11 would be allowable if rewritten or amended to overcome the objection(s) to under 37 CFR 1.75(a), set forth in this Office action.

*Cited References*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references relate to an optical recording medium having a groove with slant surface or track on which servo pits are formed asymmetrically in a tracking direction.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thang V. Tran whose telephone number is (571) 272-7595. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Thang V. Tran  
Primary Examiner  
Art Unit 2653